

Appl. No 10/665,640

Amdt. Dated 05/19/2006

Reply to Office action of 03/31/2006

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Amendments to the Specification:

Please replace the paragraphs from page 6 line 4 to page 7 line 7 with the following amended paragraph:

Referring to Fig. 3, wherein the timing circuit 5 generally includes a
10 quartz oscillating circuit 51, a counting circuit 52 and the time-setting knob 43.
After the quartz oscillating circuit 51 is turned on, quartz crystal of which will
output fixed frequency and transmit it to the counting circuit 52 which having
multi-stage dividers (IC1-IC9), and the signal is transacted by the counting
circuit 52 so as to enable the signals to be transmitted with ten minutes as a
15 time unit, and then the time-setting knob 43 is able to set the timer for 10,
20 ...100 minutes. With the cooperation of the prior mentioned elements, if
the user chooses the stage No.6, that means the timer is set at 60 minutes. And
then the user turns on the gas and ignite it, that is turning the rotary-knob
switch 11 and the disc-like wheel 2 follows to rotate, in this case, the
20 protrusion 22 disengages from the leaf spring 41 of the ~~inching switch~~
microswitch 4, the normal close pole (NC) is switched on to turn on the
timing circuit 5, that means the quartz oscillating circuit 51, the counting
circuit 52 and the time-setting knob 43 start to work for 60 minutes. If the user

turns off the gas before the set time expires, the disc-like wheel 2 will follow to rotate so as to make the protrusion 22 touch the leaf spring 41 of the ~~inching-switch~~ microswitch 4, that is switching off the normal close pole (NC), turning off the timing circuit 5 and cutting off the power of the motor 3. And
5 thus makes the timing circuit 5 return back to its original state. If within the set time limit, 60 minutes is reached but the user forgets to turn off the gas, positive electricity will be transmitted instantly to the motor 3 for driving the disc-like wheel 2 to return back to its original position, and thus makes the rotary-knob switch 11 return to turn off the gas, at the same time, the
10 protrusion 22 will touch the leaf spring 41 of the ~~inching-switch~~ microswitch 4, such that disconnect the timing circuit 5 and the motor 3 from power.